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TONAL CENTERS:
EXPERIENCES WITH LEARNING CENTERS IN THE MUSIC CLASSROOM

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ABSTRACT

This study focused on the implementation of learning centers on sixth grade general music students and the effects on engagement and student achievement. Fourteen sixth grade general music students participated in this study. The school was a suburban intermediate building (grades four through six) of approximately 1,050 students located in eastern Pennsylvania.

The study found that learning centers had a positive effect on both student engagement and student achievement. In analyzing the data, four main themes presented themselves. First, students were able to gain a sense of responsibility toward their own learning during centers. When students displayed self-responsibility for learning, levels of student interaction as well as achievement rose. Next, learning centers provided motivation for learning. This not only enhanced the students' interest level, but also enhanced engagement in all aspects of the classroom. Third, when students were interacting in a positive manner with one another, the possibility for achievement grew dramatically. As a result, the discourse occurring in the classroom was conducive to further academic growth. Lastly, the flexible social structure of each group demonstrated that students were comfortable assuming different roles in their group. However, students tended to be less engaged with tasks when there was no determined leader present in the group.

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RESEARCHER STANCE

Growing up, my idea of a dream job changed constantly. I went from wanting to be a musician to a baseball player. When I realized I was probably too small to be a baseball player, I decided that I wanted to be a lawyer. After a few mock court cases of defending people whom I thought were guilty, I quickly chose to once again become a musician.

As high school continued on, I began to realize that soon I would need to make a career choice. During my junior year, I fell in love with musical theatre. I loved the thought of being able to play any role I wished. I could one day be in a dramatic performance where someone's life hung on the line, and the next, I could be the comedic relief of a happy-go-lucky show. Unfortunately, as I began auditioning for schools, I quickly realized that most of the "competition" had been preparing far longer than I had.

It wasn't until my senior year that my high school band and choral directors pulled me aside to talk to me about how my college plans were going. We discussed the fact that I felt my auditions had not gone well, and I did not get into two of the three schools I applied to. It was at that point that they looked at each other, smiled at me and said, "Adam, you would make one hell of a teacher." I laughed. I was very hesitant to accept the idea at first. I had never taught anyone anything in my life, or so I thought. But as the days and weeks moved by,

I began to reflect on why they had said what they had to me. The more I thought about it, the more I realized I really loved helping people do things to the best of their ability. So, as college approached, I decided I would give teaching a shot.

My college experience gave me a vast amount of knowledge that is now useful in my career. Most of the information that I learned was content based in Music. This was extremely helpful, but there was not a great deal of methodology, which I had hoped for. This became more evident during my student teaching. I was able to begin developing my teaching style and began building a rapport with students. But there still seemed to be something lacking, and I could not quite put my finger on it.

Once I began teaching, I knew that I truly had made the right decision. However, I instantly knew that I wanted more. So I began looking for a master's program that suited my needs and beliefs, and began taking classes. I was not ready for the ride that I had embarked on! The classes at Moravian really pushed me as an educator. They made me strive to be the best that I could be. Not only did I gain the missing pieces that I was looking for, but I also gained a firm grasp on my teaching philosophy. This may not sound big; however, it was only before beginning my action research that I truly realized that I had not thought much of my teaching philosophy. With the help of the faculty at Moravian, as well as through my own experiences, I developed a solid philosophy which did aid in

finding my research topic. After a few years as an educator, there are several things that I wish for my students.

I wish for my students to be well-rounded, open-minded, thoughtful, inquisitive, and never settling for mediocrity. I hope that when my students finish their educational careers, they are able and willing to fulfill most any task that is set before them. I wish for my students to be accepting of many points of view, whether or not they personally agree with those views. I wish for my students to be thoughtful and reflective about not only what others do, but also about what they do. I hope that my students question constantly, and do not always just accept what they hear as “Truth”. I also wish that students of mine do not accept just getting by. They should put forth maximum effort at all times in order to get the most out of their learning. I truly wish for my students to be challenged, but never overburdened.

I would also want my students to take responsibility for their own learning. They need to be able to know how things work, how to carry themselves, how to problem-solve and know how to find answers. Not only should these students be capable of knowing how to carry themselves, but they should also be able to reflect upon the journey that they have taken to get to where they are. Students should be able to dictate how they came to be where they are, and what actions they took. Freire (1970) helped put my thoughts into order.

Freire stated that, "...human activity consists of action and reflection: it is praxis; it is transformation of the world," (pg. 125). I truly feel that students should be able to take part in this process to enhance their learning.

Too often, useless and meaningless lessons are employed with students. While these fun and maybe interesting lessons may grab the attention of a student in the moment, the student never really leaves the class learning anything. I would love for my curriculum to begin with the big ideas and concepts that I taught throughout the year, and be able to create and use assessments that are valid and meaningful.

Technology would take the forefront in my classroom. With all of the new software and instruments now available to create music, it would be foolish not to incorporate 21st Century learning into a 21st century classroom. Students would also be able to use everyday technology such as iPods and cell phones in the classroom. Many educators are hesitant to incorporate such items; however, when these items are properly utilized they can truly "hook" a student into the material and the learning process.

Music is a very powerful content area for learning. With that said, the uses of music would be a central concept in the formation of this curriculum. Since music provides a performance-based class by nature, it would also be critical to include how a musical performance can affect a person. Reflection

must also be included in this curriculum, for without it students are certainly wasting time and energy. Students need to be allowed the opportunity to see what they learned, why they learned it and how learning it will affect them. In terms of curricular concepts taught, music literacy would be a huge portion of what my students learn. The idea of teaching literacy, on the musical level, is parallel to that in language arts. It is a basic means of communicating and without the proper devices and skills, communication will not be possible.

Several teaching models and methods would be used in my ideal curriculum. Students will keep musical portfolios of their work and performances throughout their educational careers. Not only would these serve as reminders of their growth, but they will also require students to utilize their 21st century learning skills. Learning centers will also be used in the classroom as a means of incorporating more student-centered learning experiences. While at times lecture may be appropriate for some concepts, students will be focusing on performance-based projects and assessments which best align with them. This will enable students to better reach their zone of proximal development. Vygotsky (1978) tells us that, “the zone of proximal development furnishes psychologists and educators with a tool through which the internal course of development can be understood,” (pg 87). By understanding these zones, educators are more able to

understand which models and methods used in the classroom are best suited for the students in the class.

I believe the purpose of schooling is to prepare students for their adult lives and careers. I feel we want what is best for our children, and we want them to have a better, more meaningful and fulfilling life than what we had. I feel that while learning is often hindered by top-down curricula and bureaucratic standards, it is often the unintended curriculum that brings about the most meaning. Thus students not only learn about their content areas and about concepts that will help them further their learning, but they also learn how to be an active, positive citizen of the world. As they continue through their schooling, they will have numerous experiences, both good and bad, that help them grow into who they will become. Dewey (1938) reminds us that, “growth, or growing as developing, not only physically but intellectually and morally, is one exemplification of the principle of continuity,” (pg. 36). Continuity is a process that cannot be prevented. However, while we cannot force students to learn, or participate, or be productive members of society, what we can do as educators is provide them with the opportunities for learning experiences to do so. And sometimes, all a student needs is just that, an opportunity.

Not only do the students need an opportunity, but so do the educators. I had not truly had the opportunity to look for, or develop any methods in my

classroom. Through Moravian's program, I learned about learning centers. I thought it would be a great way to have students experience learning in the classroom, as well as allow the students the opportunity to take ownership for their learning. As it turns out, fate may have already been interceding with my plans.

The idea of using learning centers in my classroom had been at the forefront of my mind for a great deal this school year. I was reassigned to the intermediate level two years ago. Instead of teaching mainly primary grades, I am now instructing students in grades 4-6. While I had hoped that keeping the interest of these older students would not be a challenge, I have noticed that this is not the case. I was forced last year to try to find ways to connect with the students, and found that focusing on the interests of the students was helpful. Unfortunately, some of my older students (6th graders) were not so easy to please. Finding creative ways of implementing new teaching methods was a bit tiring. Luckily, the new configuration of our school district aided me in terms of my research project.

Last school year, our intermediate school instituted learning stations during a new E/I (enrichment and intervention) period. This new period occurs twice during our regular four-day lesson cycle. Classes either have E/I on A and C days, while attending an extra technology class, or they have E/I during the B

and D days allowing them to attend the extra technology class during the remaining two days of the cycle. I feel that when this process is completely concrete, students will benefit greatly from the extra practice in whatever content area they participate in. However, there is a minor flaw. While students who do not need interventions for learning are permitted to choose their learning station during the extra days, the students involved in our districts RtI (Response to Intervention) program are not able to participate in the extra learning stations that are offered.

After the Winter Break, I was assigned to run an intervention for two 5th grade students. I was apprehensive at first, but gained a great deal of knowledge from running this program. I have also been exposed to the fact that the students I have during intervention time are upset at the fact that they must participate in their intervention learning, and have no say as to what they learn. These students are, at times, not engaged whatsoever in the activities that are planned for them. Likewise, I have several other students in my general music classes that are in 6th grade that often make comments about not having the opportunity to participate in the learning stations occurring during their E/I time because they were placed in intervention groups. Seeing as the 6th graders in my general music classes often lack the level of engagement that I would expect, I wondered what would happen to my students if I offered them some sort of choice learning stations in class. I

would hope that their participation and engagement levels would greatly increase, and while not the main focus of the study, it would be significant if their academic achievement levels rose as well.

Noting that my core beliefs are student interest, choice and life-long learning, I am extremely interested in seeing how learning stations will work, or not work, in the context of a special area classroom. Knowing that I only see my students once every four school days sometimes puts a damper on the content that we attempt to have them learn.

I am hoping that the implementation of learning stations in my 6th grade music classroom will enable students to stay more engaged in the class, while also heightening their learning, knowledge, and appreciation of music. I feel that by using these stations, I can also instill a yearning to continue their musical studies through the rest of their lives.

LITERATURE REVIEW

Implementing learning centers into a classroom allows students to take an active part in their learning. When involved in learning centers, students are able to be more engaged in class, increase academic achievement, and take increased responsibility for their learning. Because of the student interaction that occurs during learning centers, students are supported in their learning through a peer network that can assist them along the way. By utilizing learning centers to create a comfortable learning atmosphere conducive to learning, students can hopefully develop a life-long love of learning in any subject area.

Benefits for Implementing Learning Centers

A learning center is "...an area that allows students to fulfill curricular goals by choosing from a variety of hands on activities" (Devany, 2005, p. 1). Students typically will travel from center to center in a classroom in a small group. Each center will be focused on a different activity designed to meet a particular objective. In Devany's research, there are five main reasons for investing classroom learning time in learning centers: time, individual student needs, positive student behavior, self-concept growth and opportunities.

Stafford (2008) designed a website with a plethora of various learning centers for the music classroom. In creating this database, she notes that learning centers can:

“..be a terrific learning tool in the music classroom, allowing students to learn the same information, but in different ways, and in a way that allows them to work at their own speed”.

Pautz (2010) utilized learning centers in her classroom as a means of showing both performances and "informances" (a method of informing others of learning). After her inclusion of learning centers as well as other methods, she noted that, “Learning centers are an efficient and wonderful way of organizing the classroom for at least 50% of instructional time” (pg. 24). Increased organization in the classroom is a tremendous start to having students become more engaged in their learning process, as well as helping to improve achievement in any academic area. It should also be noted that Pautz demonstrated how the students are able to use the learning centers as a means of informing parents (and others) of how the students take control of their learning in the classroom.

According to Hainen (1977), the breakdown of a specific subject into its different components and the building of a learning center thematically based upon each component have afforded students, within a limited context, the opportunity to shape their own curriculum. Interactions amongst students and

teachers occur more frequently when active learning takes place at centers.

Various grouping and possibilities for activities exist, as well as the potential to challenge students of all ability levels. Creating learning centers in some content areas can be difficult. With some music classrooms having limited access to technology, music learning centers can “...help to alleviate the problem of what to do with students who are not at a computer” (Casey, 2005). Casey also noted that:

“...centers can help with behavior management: students are excited to be able to use the computers (in centers) and are often more motivated to stay on task” (p. 2).

As a result of implementing centers, Casey found that the use “...entices students to actively engage in learning” (p.3).

Student Engagement

The National Survey of Engagement (Indiana University, 2006) lists several common characteristics of engagement in class. These include asking questions about content, remaining on-task during instruction, working with other students during class and discussing ideas or concepts learned in class with other students. Each of these characteristics could be measured separately or together to identify engagement that occurred in the classroom. As a means of measuring

student engagement, Ruhe (2009) created a toolkit to help measure engagement in the classroom. In using this toolkit, educators can manipulate the appropriate surveys and questionnaires or create their own assessments to use as engagement measurement tools in the classroom. This enables educators to observe and analyze the characteristics of engagement that are most meaningful and useful in their research.

When students are interested in a topic, they are more likely to be engaged with the learning process. Devany (2005) notes that students are motivated and gain new understanding from learning centers (p. 2). Students who are more motivated are more involved with the learning that is occurring in the classroom. According to Hainen (1977), "...learning centers need to be as inviting and attractive as possible" (p. 4). She also stated:

"Over the course of time, students can then decide what areas of study are most interesting to them individually and learn to work and cooperate with other students in the class" (p. 1).

Kenney (2004) agrees with this idea. She stated:

"...we might simply say that young children learn by interacting with their environment. They construct their own knowledge by trying to make sense out of whatever is around them, and they develop skills by manipulating what they find interesting" (p. 29).

Keeping students on-task during their engagement in centers is also an essential aspect to success. Marvin (2007) found that students were more on-task during centers due to the fact that they did not have to worry about peer response to their work at centers. Often, students would be embarrassed about not knowing something, and this would lead to off-task, non-engaged behaviors. In the centers, students became more responsible for their own work, leading them to be more involved with their learning, which would hopefully encourage a life-long love of learning. This love of learning would hopefully translate into the students' becoming more engaged with their own learning process, as well as advancing their levels of academic achievement.

In 2009, Niland produced research that shows how influential engagement and involvement in music can be for children. Niland showed that free musical play (where students have different activity options) helps children to be more deeply engaged over longer periods of time and show greater persistence than is often evident in teacher-led group music making. Niland also showed that "...child-centered early childhood music curriculum can nurture the innate musicality of young children so that they become and remain music makers throughout their lives" (p. 20).

Romeo and Young (1997) conducted a study on a learning center in a fifth grade classroom. During the study, they noted how engaged and involved the

students were during the center time, as well as the high levels of student interaction that occurred. As a result of the comfortable learning environment and the added levels of social interaction created by the center, students were more motivated to participate and more engaged in their learning.

Pautz (2010) noted that through the use of learning centers as a means of informing others of learning, students get the opportunity to truly demonstrate their engagement with learning material while also showing heightened levels of achievement. During classroom learning, students would need to have high levels of engagement to be able to learn the materials being presented. Therefore, by increased engagement during the learning centers in class, students should be able to fully inform others of their learning through authentic presentations.

Student Interactions in Learning Centers

The manner in which students interact with one another is a vital aspect to the successful outcome of learning centers. Cohen and Barbara (1982) found that when students working in centers based on group tasks as opposed to individual tasks, social status came into play as to "...how each member of the group interacted in the setting" (p. 30). Also, the more that the children talked and worked together, the more they learned from the curriculum (p. 26). While

students may have the opportunity or responsibility to complete a task or assignment on their own, their research shows that the "...interaction amongst students actually helped achievement, regardless of the (students') expected social status level" (pp. 22-24). Cohen and Lotan (1988) later found through research that students'

"...interdependency (on another) reduces uncertainty by helping students gain access to the task and by providing assistance to those in need" (p. 36).

These studies clearly showed that when students are afforded the opportunities to be socially interactive with one another, enhanced engagement, and greater classroom involvement tend to be a direct result.

In a study investigating social interaction of young children across various genders and races, researchers found that students are able to interact socially at a high level through learning centers in different subject areas (Day, Hunt & North Carolina University, 1974). However, Schmidt (1994) found that along with the increased interaction, teachers must become more aware of the informal discourse in learning centers, since it might represent classroom cultural/demographic conflict or struggle. This means that since students might come from diverse backgrounds, students might interact with other students in ways that could hinder the learning process. It should then be noted that due to certain

uncontrollable variables that exist among students' demographics, teachers should be aware of social interactions among all of the students in the groups.

Day, Hunt and the University of North Carolina (1974) conducted research that showed while students are in learning centers, they might not randomly engage or communicate with others in their group if they are of different age levels. However, the research concluded that grouping students by age did show random and elevated levels of engagement and involvement with one another with the appropriately prepared classroom environment.

Students who are engaged and involved with their learning need to have good social interactions with others in the class. Gooding (2009) found that "...children are often motivated to become involved in music because of the social aspects of music making" (p. 37). Gooding also noted that when positive social environments are promoted in music programs (through centers), initial involvement in music programs is actually encouraged onto students. Moreover, this research shows that benefits of social interaction during learning centers include:

"... facilitation of positive changes in social behavior, stimulation of nonverbal expression, facilitation of social play, development of group cohesion, and improvement of on-task behaviors" (p. 37).

Enhanced Student Achievement

Along with engagement, achievement is often a goal of learning centers. The teaching (and learning) of fundamental knowledge is an imperative aspect of educating. Kenney (2004) found that if students are taught basic structures of music within the context of a learning environment promoting time and freedom and have the musical materials to construct meanings of their own through exploring and experimenting, a child of any age will gain a broad foundation of music knowledge (p. 29). It is also helpful to use the National Standards as a guideline for laying out centers based on singing, listening, and performing instruments (p. 29). A study run by the Texas Public School system (1997) noted that better student-level results were accumulated in the school system when learning centers were implemented and focused on matching teaching to student learning styles (p. 12).

Enhanced student achievement is commonly an anticipated outcome, if not the main outcome of many action research studies. Cohen and Lotan's study (1987) showed that when students are afforded the opportunity to work together in learning centers, learning outcomes including achievement are improved by allowing students to use one another as a resource. This was a quantitative study, and it should be noted that there was a significant statistical growth in students' testing scores following this study, even though the sample size was small.

Johnson, et al. (2003) conducted a study on having teachers learn about learning centers, and employing them in their classrooms. While the focus was on the learning environment, it is important to note that the findings of this quantitative study did show that nearly 80% percent of the students involved were able to easily identify a concept or skill that was learned during the course of the learning centers.

Myers (2002) describes the response of her students as they worked in learning centers in her classroom:

“...attitude(s) have changed since I have designed the classroom differently. They enjoy working in the areas. They will try to complete their classroom assignments in a timely manner so that they will go to the centers and participate in different activities.” (p. 17).

The responses from the children indicated that they took more pride in their work when learning centers played an active role in their learning in the classroom.

Niland (2009) tells how the use of learning centers in the music classroom can greatly affect the child's learning process. Her thoughts highlight how the learning centers, being student-centered, allow the students to become active participants in their learning. Niland states that, “(The students’) involvement can also serve to highlight the integral place of music in the broader curriculum” (p. 20). Various aspects of these centers play a role in achievement. The center

based on learning stories “...describe and analyze learning in a holistic way so that the children’s musical development is recorded as part of their general educational development” (p. 20). When teachers incorporated the use of learning centers, they were better able to create a music curriculum that was student-centered and is supportive of young students’ development. It also integrated students learning into wider curriculum as well as into the students’ lives.

Pautz (2010) found that students who participated in learning centers as a means of informance, or a means of informing others of learning, are actually able to take responsibility for their own level of achievement. Because of the students’ increased achievement, they were able to display their learnings in an authentic manner that made the learned material relevant and personal to the students. Through her observations, Pautz was able to see how the students were able to grow academically as well as personally through the utilization of learning centers.

Summary

Student’s engagement, interactions with their peers, and achievement are greatly affected by utilizing learning centers in the music classroom. Learning centers allow students to learn in a manner that is relevant and fun to them while enhancing their achievement and engagement during the process. Students are

able to learn in a way that they can rely on each other, interact responsibly with classmates and are able to take ownership for their learning.

RESEARCH DESIGN AND METHODOLOGY

Setting

The intermediate school where my study took place is located in a suburban school district of 4,700 students. The population of the school is approximately 1050 students ranging from fourth to sixth grades. There is only a small amount of diversity amongst the students which included only a handful of minority students. While there is some socioeconomic diversity, there was not a significant difference from one end of the spectrum to the other.

Participants

Participants for this study were selected from one sixth grade general music class. Fourteen of twenty-six students elected to participate in the research study. Eight students who chose to participate were male and six were female. The ability levels of the participants were slightly diverse ranging from 5th grade reading and mathematics levels to above 6th grade reading and mathematics levels. In the group, two students had IEP's; however, modifications of the study for these students were not necessary for compliance. The main focus of the study was on a group of five students, all of whom were at similar learning levels. This group had three males and two females with no ethnic or learning diversity and very little difference in socioeconomic status.

Data Collection

Before I was able to collect data for my research study, I had to first receive permission from the Moravian College Human Subjects Internal Review Board (HSIRB). A packet including the methodologies, anticipated procedures and appendices that were to be used was submitted and approved. Consent also had to be obtained from my school's principal, as well as the assistant superintendent of the school district. These letters included all information pertaining to the study. After receiving permission from my administrators, I then had to obtain permission from the parents of the students to collect and use data in my study. In this document, parents were notified of the study, how it would take place, and all facets that included their children and their children's work. Parents were notified that they may choose to exclude their children at any point during the study with absolutely no repercussions. For this study, four different methods of data collection were used: observation logs, surveys, frequency counts, and student work.

Observation Logs

The observation logs used were created in a manner that would be easy for me to document what had occurred at each of the four learning centers that were happening during each class. Each log entry comprised four pages, one page for

each rotation that occurred (Appendix D). The log was separated into a table for each center. During each rotation, I observed what was going on during each center. I documented what I saw occur, quotes from students and my reflective thoughts while I was observing. Student feedback was also collected as part of the observation log. Students were able to critique the tasks laid before them to inform me of their thoughts and feelings during the research study. The organization and up keep of this observation log enabled me to easily translate all observations and occurrences during the study into my final research story.

Surveys

Students completed two surveys based on engagement during the study. The first survey asked the students to reflect upon their current level of engagement during music class (Appendix E). This survey was administered on the first day of the research study. Students then completed a final survey on the last day of the research study (Appendix F). This survey was very similar to the first survey that was completed, however, the aim of the survey was focused on behaviors while participating in the learning centers. Students were also given the opportunity to provide written feedback after they completed the survey. Data gathered from these surveys allowed me to examine students' perspectives of their engagement from the beginning of the study to the conclusion.

Frequency Counts

A frequency count chart was created in order to document how often particular facets of engagement occurred with students during the course of each center presented during music class (Appendix G). These facets included behaviors such as asking questions in class, contributing to class/group discussions, working with other students during class and actively participating in learning centers. The count also included whether students were engaging in activities unrelated to classroom tasks. The frequency counts were applied to the entire participant group to see how the observed behaviors of engagement occurred throughout the study.

Student Work

All work completed by the students during the centers, as well as assessments given at the conclusion of units during the study, were collected for analysis. These documents provided information concerning the levels of achievement obtained by each student during the study.

Trustworthiness Statement

Throughout the duration of this study, it was important to keep in mind the goals which I had set for the study. Observing engagement and student achievement is not always a simple task. Methods I chose to support and strengthen the trustworthiness, credibility and validity of my study were low inference descriptors, data triangulation and participant feedback.

By using low inference descriptors, I was able to utilize the data that were obtained through my observation logs. When a student said or performed something that showed his/her level of engagement, or continually repeated a behavior indicating engagement, the datum strengthened the validity of my study. These reoccurring instances, one way or another, supported what happened in other sources of the data triangulation process.

The process of data triangulation also helped to create the necessary validity needed for this qualitative study. Utilizing the observation logs, frequency counts, surveys and student work, I was able to make connections as to how the students' levels of engagement and achievement increased, decreased or remained the same. Regardless of whether the outcome was positive, negative or neutral, this information helped me draw conclusions about the research question.

I feel that the participant feedback may be one of the strongest sources of the four forms of triangulation that I used. While certain behaviors and

occurrences were observed, it isn't until one hears from the participants that one can actually tell what the students were thinking and feeling. I believe that there are aspects of student engagement that can only truly be discerned by the participants themselves.

MY STORY

“What do you mean he’s not here?” I asked frantically. I must have been sweating bullets. I could feel my heartbeat escalating. I’m surprised the students couldn’t hear it. It felt like the steady cadence of a drum corps as they marched onto the field for competition. I took a second to regain my composure. If he’s not here, what’s going to happen with the group? How are they going to function? Will they accomplish the tasks that I’ve laid before them? What sort of data could I possibly collect if he’s not here? What a miserable day. Something has to go right.

When I arrived at my graduate class gathering that evening, I didn’t know where to start, or what to report. I had observed a class in which a student who normally leads his group during my research study was absent. I felt defeated. I sat back in my chair just counting down the minutes until I could go home. As the class discussion continued, I tried to listen to everyone’s comments about how their study was going. As my peers one by one described what was occurring in their own studies, I began feeling guilty for my negative attitude. As I attempted to provide suggestions or input as to how others could interpret what they observed, I thought maybe I should throw my dilemma into the discussion pit and see what we could come up with.

I began to share my observations with my peers about how the class had run that day. I noted how the atmosphere of the group to which my student belonged was just different. I couldn't put my finger on why, but it was just different. At the beginning of the lesson, I had anticipated a total meltdown of the chemistry of the learning center group. However, the more I went on, and the more input I received from my peers, I began to realize that maybe this incident was more than just a ripple in the water. Maybe this was something that needed to be investigated more thoroughly. So I went back and looked through my observation logs from the previous weeks. I made an effort to really focus on this center group and see what was occurring. After spending hours analyzing what had occurred within this individual group, it appeared that I had found my diamond in the rough.

And so it begins....

It had been a long, but anxious summer. I had spent hours trying to decide what materials had to be presented during the learning centers. Also, the implementation of standards-based report cards was another added "bonus" for my research study. But I had a feeling that this would actually help me remain focused and poised throughout the duration of my study.

When school came back into session, I thoroughly explained my study to the other music teacher in my building. With such a large population, our

building required more than one general music teacher. She was completely onboard with my study, and integrated the components into her class as well. This enabled me to have a solid support structure to bounce ideas off of, acquire resources, and just be able to check in to see how things were running.

So we began to plan for our first lessons. We had hoped to stay a lesson or two ahead of where we were so that we would not get swallowed by the new assessment protocol implemented in our building, along with my research study. As our first week of school began, we were able to begin gauging the student's feelings towards the learning centers.

"This is cool!"

"I've done these before."

"I GOT IT, I KNOW WHAT WE'RE GONNA DO."

"AT LEAST IT'S SOMETHING DIFFERENT."

"Oh, you mean like we're going to get to do a little bit of everything?"

"Whatever."

"Cool!"

Figure 1. Pastiche of student responses to study

These are the responses I received from my students when learning that they would be experiencing the learning centers in my classroom. This pastiche demonstrates the students' thoughts as they discovered the adventure they would soon be beginning.

I began by explaining to my students that teachers also were students. All teachers must continue their education. Just because teachers had graduated from college, didn't mean that we could just go in and teach everyday without continuing our learning. "In all reality, teachers are lifetime students", I told them. "We never really stop learning. We go to classes, we find new and cool ways to teach our students so that we make learning not only interesting and fun, but we make it relevant to what students need to know". After looking for approval from the students, I administered my first survey.

The survey asked the students several questions about their current levels of engagement during music class, as well as their interest levels about musical aspects taught in class. These aspects included singing, performing on instruments, reading and writing music, and listening to music. After collecting the surveys, I informed the students about the process of how the learning centers would work. A few of the students admitted that they had participated in centers before and were excited to see what they would be offered in the coming weeks.

As the students exited the classroom, I couldn't help but wonder what they really thought about the project.

When students entered class the next day, I began by reviewing the process of how each center would run. Students were assigned to specific groups that would rotate together to each center. There were four centers: Singing, Listening, Notation and Performance. At each center, students had to locate the instructions folder which had all materials and directions for the assigned task. Each rotation was scheduled to have five minutes to complete the task, after which I would play the piano to get the attention of the students and they would clean up their materials. After completing the task assigned, each group would then travel about the classroom to the next center. When I felt that the students were comfortable with the process, we began with our first rotation.

Group A was the first to reach the singing center and began working immediately. Several of the students in the group began conversing with one another about the melodies that they were singing. Each student in the group shared his or her input about the melody after performing the song.

At the listening center, Group B started off strong by reading the directions and preparing the selected piece of music to listen to. Within one minute, students began to lose focus and tried to concentrate on what the other groups were

doing. After a brief redirection from me, students continued with their assigned task.

Group C was extremely off task when they arrived at the notation center. One of the students actually left the group momentarily in an attempt to move directly to the performance center and play the instruments that were set up. I quickly reminded the student that he would have the opportunity to play the instrument as soon as his group rotated to the next center. Although the student returned to his group, he was visibly upset that he did not begin at the performance center, and did very little work at his designated station.

While Group D did immediately read the directions when they reached their center, they did not follow the directions. Most of the students at the center played the instruments randomly instead of practicing the given rhythms at the center. I had to keep a constant eye on this group to make sure that they remained on task. By the end of their time at the center, all but one student was following the given directions.

At the conclusion of the first rotation, I quickly went over the protocol for ending the centers. After checking to make sure the students understood the procedures, we continued onto our second rotation.

Group D continued to be off task when they began the singing center. One female student began strong by reading through the given melody, however,

quickly became off task when the rest of the group attempted to sing the melody. Another member of the group spent the entire time fooling around by himself while the remainder of the students tried to accomplish their task.

Group A seemed to enjoy the listening center. Every student read through the directions carefully and listened closely to the music as it played. They followed along with written music tracing the patterns of notes on the page as the song played. There was very little conversation as all students seemed highly interested in the music that was playing.

Over at the notation center, Group B once again interacted with each other constantly.

Susan: “Wait, this is four-four time. So what should I write?”

Alan: “Oh, I know that! Here’s what you do.....”

Thomas finished his work before the rest of the group. He carefully double-checked his answers, and relaxed while his group mates finished writing down their answers.

Group C had some complications following directions and staying on task. One of the members was actively trying to play the given rhythms, but he decided to retrieve an instrument from another part of the class instead of using the assigned instruments. The boys in the group were constantly off task. They were talking to each other, ignoring the directions of the assignment. While the boys

lost their focus, the girls worked together to complete their task. In an attempt to help regain their focus, I performed the listed rhythms and asked questions.

Mr. G: “Ok, what did you notice about the pattern that I just performed?”

Megan: “Well, you played the rhythm twice. You repeated it.”

Mr. G: “Good. So why did I repeat the rhythm?”

Megan: “Because it has a repeat sign at the end.”

Mr. G: “Excellent, does everyone see the repeat sign? Keep on working.”

As time dwindled on the second rotation, I noticed that most of the groups were actively attempting to complete their assigned tasks. When I noticed a lull in the noise, I sounded the piano and we began the third rotation.

Group C quickly ran to the singing center so that they could gain control of playing the music. Although the group as a whole began off task, both the boys and girls slowing calmed down and started to focus on their assignment. The girls sat together and followed along with the music before attempting to sing. The boys did the same, tracing the melody with their fingers so that they knew how the melody would move.

The listening center, once again, seemed to keep the students in control. Group D carefully read the instructions and played the given piece of music. All but one of the students were following the music in their books to see how the

song played out. One girl decided that she preferred to doodle on a piece of paper instead of listening.

Group A used their time very efficiently during their center. Each student began reading through their assignment, and quickly began writing down answers as they discovered them from the book. As the minutes moved on, students were constantly going back to double-check their answers for accuracy.

The interaction of students in Group B was very refreshing. Lisa and Thomas worked together to identify the various rhythms listed on the paper prior to performing.

Thomas: "This one is a whole note, so it lasts for four beats."

Lisa: "No, half."

Thomas: "Oh....OK. I got it."

Susan appeared off task at first because she was dancing amongst the group members with her instrument. When I looked again to see what she was doing, I noticed that in fact she was performing the rhythms listed on the page while moving. She was smiling, and laughing as she twirled about.

After another brief reminder of how the groups should clean their current center and move quietly to the next when directed, we began our last center of the day. Group B sat down immediately at the singing center while Alan took the reigns of the group. Alan read the directions out loud for the group to hear, and

the group promptly began listening to and singing the song assigned for the center.

Group C also appeared to get right to work. Five of the six students listened to the assigned song intently, following the lyrics as they moved through the song. After listening to the piece once, the members of the group began questioning each other about the assigned problems, and an intense discussion of locating the answers ensued.

The members of Group D all remained focused through the duration of the center. Each students had their own text book in front of them and worked quietly to find the answers to the given questions.

Group A was slightly off task when they began their final center. Two of the students encouraged the others to go browsing through the instrument closets behind their group in an effort to find more interesting instruments. I quickly redirected them to remain at the center and use the assigned materials and I assured them that they would soon be able to use “better”, or more interesting, instruments in the coming classes.

When I played the piano for the final time that day, I noticed that all four groups remained quietly at their centers. Each group was silently cleaning up their materials, and no one began wandering off to their assigned seat or to another center. “YAY!” I shouted to myself. It felt like a huge weight had been

lifted off of my shoulders that the students followed all of the directions. Maybe this wouldn't be so bad after all. I was not sure how the following classes would run. Although students seemed at least somewhat interested, I couldn't help but think about what would happen should the students become uninteresting in learning and playing.

The second class began with the students being very chatty as they entered. I quickly went over the intended concepts and objectives of the day. Students would be learning about syncopated rhythms in melodies, as well as following the strong beats in the melody. Group B began the day at the singing station. During this rotation, Thomas stepped up as the leader in the group. All of the members of the group sat quietly while he read the directions for his classmates. While the girls in the group worked quietly on reviewing the melody of the song, Alan and Jason spent their first minutes of the center fooling around with one another. After three more minutes had passed, the rest of the group lost focus and joined these two boys leading resulting in unfinished work. I hoped that this would not be a reoccurring trend for this group.

Group C quietly went to their center to review the assignment. The girls in the group sat down and began listening to the music, while most of the boys chatted quietly instead of paying attention to the task at hand. One of the boys realized that chatting with the other boys was not going to help him get his work

done, so he moved over closer to the girls and actively listened to the music to complete his task.

The notation center did not start so well either. The members of Group D sat down and instantly began talking about what had occurred earlier in the day, as well as what they would be doing after school. I stepped into their circle without saying a word, and all members quickly began working. I stayed close for another minute, and surprisingly their chat about the day turned into discussion of the musical vocabulary words that they were assigned to identify. “Finally!” I thought to myself. “They are getting work done!” There were moments while observing this group that I wondered if they even really cared, or if they were just going through the motions.

Group A was very aware of their task, and seemed excited to be performing instruments first. As the group continued to practice their syncopated rhythms, I approached to ask some leading questions. Unfortunately, the silence that followed was deafening. The students seemed to know that the unusual rhythms were different, but they simply could not put their fingers on how so.

As the piano sounded, students began to move toward their next centers without cleaning their current center. I played the piano loud and abruptly to gain their attention, and most members returned to their center to put back the used equipment. The first rotation took longer than I had anticipated and I noted how

most groups had not completed the assigned work. I wondered if the students simply needed more time to complete the tasks that I had given them.

During the second rotation, Group A was fast to approach their center. Previously, a small xylophone was placed at the center with the notes of the melody marked so the students knew which notes to play and perform when singing the song. I decided to switch to a laptop computer to play the song with an accompaniment to hopefully ease the fear of the students who were singing. All of the members sat quietly around the computer as if they were listening to a story told by their grandfather. Each student carefully followed the melody in the textbook and openly attempted to sing the melody when they played the song for the second time. One boy seemed intrigued by the computer, but soon found himself with his face glued to the text.

Group B slowly approached the listening center reading the directions carefully. As they listened to the music, they read over the leading questions that I had laid out for them. After the song had completed, students engaged in a lengthy discussion of the thoughts and meanings intended by the songs' lyrics.

At the notation center, Group C immediately began locating their new musical vocabulary words and scoured through the text to find the meaning. The girls in the group apparently decided to help each other out, leaving the boys to fend for themselves. Each of the boys worked independently. One of the boys

claimed to have completed the assignment in approximately three minutes. Instead of assisting the other students, he sat with his legs sprawled out on the floor, and appeared extremely bored. Maybe he was just not that into the concepts that are being taught.

Members of Group D seemed puzzled at the rhythms in the performance center. They noted that the syncopated rhythms that they played felt funny. The group agreed that the longer notes made shorter notes of the rhythm feel misplaced, almost to the point where they just fell in between the main beats of the rhythm. I asked them to recall the definition they found for syncopation at the notation center, and their eyes seemed to light up when they realized the connection between the centers that they had visited that day. I was very pleased to see that the students were able to make the connection between the centers and the concepts that they were supposed to learn.

During the third rotation, three of the four groups remained on task until I brought the centers to a close. Groups D, A and B all remained engaged and on task during their time at the singing, listening and notation centers, respectively. Each of these groups was able to complete their assigned tasks in the given time, and there were no observed occurrences of off task behavior during the centers. Group C, however, did not go so smoothly. The boys began the performance center by randomly playing on the assigned instruments. This led to the girls

joining in on the behavior. I had to constantly remind the students to stay on task before any work was completed.

As I played the piano, students cleaned their centers and anxiously awaited my command to move to their last center. Group C arrived at the singing center, and all students began listening to and following the melody. What started out as a great final center abruptly changed when two students began to carelessly sing the melody off pitch, therefore distracting the remainder of the group. As I approached, their behavior stopped. The two distracting members decided to not participate in the remainder of the center instead of acting appropriately.

It was a pleasure to watch Group D at the listening center as I observed all seven heads bobbing up and down to the music as it played. Each of the students kept their eyes locked on the book as the song played. At the end of the song, they huddled together in an effort to answer the assigned questions.

Group A went straight to work at the notation center, quickly reading the assigned vocabulary words and searching for the meanings. Most of the students finished ahead of the scheduled ending time and responsibly went back over their work to make sure they had obtained the correct definitions.

It was during the performance center that I first noticed how well Group B was working together. Susan stepped in as the leader during this rotation, taking responsibility to make sure all members of the group were on task and learning.

Susan: Guys! Come on, we have to be quiet and work through this together if we're going to get anything done. Stop fooling around!

Jason: Alright, let's do it.

Alan: Fine, whatever.

Thomas: We were just talking. Whatever

It appeared as if Susan's words struck a chord with the boys because they quickly began diving into the assigned task. Alan first attempted to play the assigned rhythm, but struggled to keep the beat. Jason tried second, but his attempt to play went no better than Alan's. Thomas, on the other hand, seemed to know exactly what to do. "Guys, that's not right! It's like this," he said. And Thomas proceeded to play the rhythm exactly as it was notated on the paper. After watching the events unfold in front of me, all I could do was smile.

A New Dawn, A New Day

While the students began the day chatty and off task, it was a relief to note that each of the groups appeared more in tune with how class ran. At the conclusion of each center, nearly all groups immediately stopped what they were doing, straightened up their centers, and awaited the signal to move onto the next center. I could see my study taking shape, even though we had only been moving forward for three classes now. And I hoped that this momentum would continue to build.

As the third observation began, I couldn't help but wonder if the students would finally be able to progress through the learning centers without constant direction on how to appropriately move about the classroom. To my pleasure, all four groups began the class by quickly and quietly approaching their centers, reading the directions out loud, and beginning to work on their assigned tasks. Group C appeared very apprehensive about singing melodies that were laid out for them. Luckily, all members of the group followed the melody in their books during the first playing of the song, and attempted to sing along during the second run through without hesitation. Group D did not seem impressed with their listening selections. Each member gazed off at the walls, looking like they were staring into a black hole. Group A quietly began identifying the pitches on the music staff at the notation center, while Group B anxiously prepared to perform their melodies on the xylophones. Susan and Jason once again paired up and assisted each other in identifying the appropriate pitches. Thomas and Lisa spent a few moments discussing their melody.

Thomas: I think it's *d-d-d*.

Lisa: No, *so...so, la do*.

Thomas: It's not closet because it's not next to it. It's the one that skips
the note.

Group B had started to work very cohesively in their group. Each member took responsibility for the information that they had to learn, and the outcome was that they were able to quickly identify the appropriate pitches and correctly perform their given melodies.

When the piano sounded, each group stopped their work, cleaned up and waited for permission to continue. Upon arriving at the next centers, Group B wasted no time diving into their singing selections. Thomas stepped into the role of group leader, making sure that every student was on task and trying to accomplish their goal. Jason gave his full effort to successfully sing the melody. This was refreshing because Jason had not always been so eager to sing. It seemed that this group was very interested in the materials that were presented. Group C actively listened to their song. All group members had their heads down in the textbook tracing the lyrics as the song played with their fingers. Group D decided to work as a whole group instead of each member trying to accomplish their goal independently. All of the members completed their task, however, the group became progressively more distracted by what Group A was attempting to do at the performance center. The members of Group A appeared confused by the directions at their center, but each member remained focused to the task at hand. As the minutes passed by, members slowly began to become off task by leaning over to the piano in the back of the room and playing random

notes on the keys. After redirection, and becoming aware that their behavior was affecting the members of Group D, Group A returned to their task to complete their work.

In the third rotation, Groups A and C attempted their work. Each group had one or two members who would become distracted by something in their learning environment, such as the air conditioning units or other members in their group. However, Group B remained focused on their work without distraction at the listening center. Group D also was surprisingly focused on their work. Members paired up, as other groups had done previously at this center. What I noticed in this group was the abilities of the students to be able to identify the notes on the xylophone by pitch name instead of having to look at the lettered keys on the instrument. It appeared as though the centers had heightened their learning and understanding of how the melodies were moving as they progressed.

Groups D and A showed high levels of interest during their final centers. Group D continuously sang the melodies assigned, while Group A danced and moved to the beat of the music they listened to. At the notation center, Jason stepped up to be the group leader of Group B. Occasionally, he fell off task. Lucky for him, his group members were quick to redirect his attention to their work. Each member seemed eager to make sure that all members had properly

learned the materials that were assigned. Over at the performance center, Group C struggled to find a happy medium in their group. The boys in the group were feeding directions to the girls. When the boys felt that they had learned the materials, they decided to find other instruments in the class to play on instead of help the girls complete their goal. Throughout the class, I kept a frequency chart of observed engagement for Thomas as he moved from center to center (Figure 2).

Frequency Count for Engagement during Learning Centers

9/30

Student: _____

| | 11 | 12 | 13 | 14 |
|---|----|----|----|----|
| 1) Asked questions in class | 1 | | 1 | |
| 2) Contributes to class/group discussion | 11 | 1 | 11 | 11 |
| 3) Worked with other students during class | 11 | 1 | 11 | 1 |
| 4) Actively participates in learning center | 1 | 1 | 11 | 1 |
| 5) Engages in activities unrelated to classroom tasks | 0 | 0 | 0 | |

Figure 2. Engagement Frequency Count 1

Thomas consistently demonstrated high levels of engagement by contributing to group discussions, working with other students in his group, and actively participating in all aspects of the learning centers. At no time during the class did Thomas become off task or become disengaged with his work.

While there were moments throughout the class where students were off task, the occurrences were less frequent than they had been in the previous class's. I also noticed how, overall, the students were firmly grasping the concept of how the pitches in the melodies were meant to move, which enabled the students to perform the melodies at a higher level on the xylophones. With the few remaining moments in the class, I notified the class that we would be having our first singing assessment the next time we met. Only a few of the students looked nervous, and most of them were students who were not fully focused on their tasks at the singing center.

I had planned to have students complete their singing assessment during their singing center. However, once the first rotation had begun, I quickly realized that the amount of time and energy I had to focus on the group being assessed left little time to observe what was occurring at the other centers during each rotation. I again kept a frequency chart to observe Thomas's level of engagement throughout the class (Figure 3) in an effort to see how he was performing.

Frequency Count for Engagement during Learning Centers 10/6

Student: [REDACTED]

| | |
|---|------|
| 1) Asked questions in class | 11 |
| 2) Contributes to class/group discussion | 11 |
| 3) Worked with other students during class | 11 |
| 4) Actively participates in learning center | (11) |
| 5) Engages in activities unrelated to classroom tasks | |

Figure 3. Engagement Frequency Count 2

Thomas remained extremely engaged throughout the class. At several times he displayed behaviors such as working with other group members, discussing materials with other students and asking questions. All of these characteristics fell under the umbrella of behaviors exhibited by an engaged student.

During their assessment, Group D performed extremely well. Both the boys and the girls decided that they would sing in trios. I asked the students why they preferred singing in the small groups, and they admitted that they were not overly comfortable singing alone. The fact that the students had other members that they could rely on seemed to have improved their courage because every member of the group sang out with great volume, clarity and poise. All members of Group D either performed at the expected level of performance, or they demonstrated an advanced level of understanding of the assessed standard. I did note that the other groups appeared focused in their centers when the first group performed. The only off task behaviors that I noticed occurred when students stopped their task to observe what was happening with Group D.

Similarly, Group A performed extremely well when assessed. The boys acted out when the girls were singing, so I had to remind them that they needed to be respectful of the girls while they sang, just as the girls had done for the boys. Both of the trios that performed in Group A also noted that they felt more comfortable singing when they were able to sing with a few other people.

Group B performed at the highest level of any of the groups. Thomas approached the center, and without any prompting, began encouraging the group to perform to the best of their abilities. The rest of the group seemed to confide in Thomas's words of encouragement, and nearly all members performed the song flawlessly. The only down side to the group's performance occurred when Alan and Jason chatted and fooled around when the girls Susan and Lisa performed their song. After a stern look, the pair of boys regained their composure and they sat quietly while the girls finished their assessment. In suit with the other groups, Group B stated that they just felt at ease when they had the opportunity to perform with other members of their group as opposed to singing individually.

Group C did not perform at the highest level. Part of this could be that no one in the group took the opportunity to read the directions at the center and properly prepare for their assessment. However, after deciding that they too would perform in small groups, each of the groups performed the melody without incident.

As the students left class, I could not help but note how smoothly class ran. It was like a well-oiled machine. Each piece of the mechanism fell right into place, enabling the students to perform and complete their assigned tasks at their centers, while I was able to focus on the group that was being assessed. And even

when the machine had a breakdown, all that was required was a simple tune up and the machine was back up and running in no time at all.

The Tonal Center of the Study

Students entered class anxiously awaiting the results of their singing assessments. I had spent some time before class reviewing my observations and the students' work. I noticed how well Group B had run through the first four classes of their centers. I had become interested in observing this group even more closely due to the chemistry they had displayed, as well as the high levels of achievement and engagement that they had demonstrated.

Groups A, C and D had digressed slightly from their previous classes in terms of their ability to function in the centers. Each group had instances where students demonstrated off task behaviors. Luckily, each group had members that appeared determined to make the group achieve their task in the center. Group B picked up right where they had left off the previous class. All students in the group approached the directions at the listening center, gathered their needed materials, and immediately got to work. After being at the center for four minutes, Jason and Alan had begun fooling around and talking. As I approached the group to help redirect, Susan and Lisa quickly nudged the boys and they snapped back into focus.

Without hesitation, all four groups stopped what they were doing when they heard the sound of the piano, and prepared to migrate to their next destination. Groups A, C and D trekked to their second center, each appearing to stop for a breather along the way, and soon found themselves immersed in the world of melodies, rhythms and performance. At the notation center Thomas took the reins as the group leader, which had become a common occurrence. This time, Thomas did very little to help his fellow group mates. Instead, he seemed to block out everything else occurring in the class in order to complete his assigned task. Alan and Jason found themselves fixated with understanding the meanings of the musical vocabulary words they were assigned. Right on cue, Susan and Lisa stepped in to assist and make sure the boys were correctly completing their work. It was interesting the way that Susan and Lisa interacted with Alan and Jason. As I watched the boys constantly check their work with the pair of girls, I could almost hear the frustration in the girls thoughts, as if they were shouting, “Why can’t they focus on their own work?”

For the first time, I witnessed Thomas lose his focus during the performance center. He appeared zoned out, as if he was transported somewhere else during this center. The rest of the group continued on their work. Susan stopped her work to help Alan when he struggled on performing the correct rhythms in the melody. Lisa took over as the group leader, assuming a role

similar to what a mother might have looked like had she been present. When Jason began to wander off task and fool around, Lisa was fast to snap, “Jason! Focus! I know you can do this. Keep working, and don’t worry about what anyone else is doing.”

As the class began preparing to depart to their final center, the students appeared extremely tired, almost apathetic to their final work. Each of the groups were off task as they began center number four, but within a minute or so, the gears of the machine had righted themselves and the harmonious balance of the world had been restored. There were no instances of off-task behavior throughout the duration of the last minutes of class. Each student quickly lined up at the conclusion, and began discussing what cool sporting event they would be doing in the next forty minutes in their gym class.

Absent?

When the students entered the classroom today, something seemed different. I tried not to dwell on it, but there was something blatantly abnormal about the students’ demeanors. As the students sat down, I quickly took attendance, checking for the vacant seats in the class. I noticed Thomas’s seat was empty, so I asked the class if he had stopped to use the restroom before coming in, which is when they informed me that he was not in school. I panicked! I had just begun seeing some interesting behaviors with this group, and

with Thomas in particular, and now he's not here? I didn't know what to expect, but I hoped for the best as the students prepared for their first centers of the day.

Group B quietly approached the singing center. Each student read the directions simultaneously and soon got to work. Jason and Alan had a hard time staying focused on their work. Each time they would start to sing, one of the boys would distract the other and they laughed until the other joined in. Lisa was fast to redirect them back to their task the first time, however, she appeared to ignore them afterwards while she and Susan focused on the assigned work. This was the first time that I noticed that there was no definitive leader taking over the group. While each student finally became engaged in his/her work, there was simply no overwhelming presence in the group that held them together. Meanwhile, Groups A, C and D each continued through their center with little distraction. Group C was the only group which needed any redirection. After I spoke to them briefly, they got back on track and finished their work.

At the second center, the members of Group B continued on their task without anyone stepping into the role of leader. Jason was able to easily identify the various styles of music that were played. He became excited when I verified his thoughts, and appeared very motivated to continue with his work. The remaining members sat quietly while they listened to the music. Unlike before, the members did not partner together or really mix with one another during the

center. Interactions with one another were extremely low, although each member was able to successfully complete his/her task. At the other centers, groups appeared to finish their work before it was time to rotate. When members from the groups had completed their task, several students began wandering away from their centers looking for other things to do. There were high levels of engagement displayed by the students at the other centers. In each center, I observed the group members asking questions of one another, all of the members contributing to their group's discussions, students working with one another and participating with the learning that was occurring in the group.

During the third rotation, Jason and Alan were instantly engaged in their task. Both boys remained focused on their assignment during the center and stopped only briefly to check their work with the girls to make sure that they were correctly completing their task. Susan and Lisa paired together and were only briefly distracted by the boys' questions about the content. Again, no individual in the group acted as a leader during the center. Group A also was on task through the duration of their center. Each member sat quietly and listened to the music. When the music stopped, members asked each other questions about what they heard and tried to answer the leading questions that I had laid out for them. Groups D and C struggled to remain on task at the singing and performance

center. I had to constantly assist Group C to ensure that they would complete their task.

During the final center, things moved very slowly. Groups C and D appeared distracted by what other groups were doing in the classroom. Each of the groups had members that worked hard to keep the group on task to accomplish their goals. Group A worked hard throughout their center. The girls were constantly communicating with each other, making sure that everyone had completed their assignment. Group B worked individually at the performance center. Each person quietly read through their assigned melody and attempted to play it on their instrument. The only real interactions that occurred with the students was when a student had a question and needed to check in with the other group members.

How will they react?

After observing Thomas's behavior during class for two weeks prior to his absence, I decided that I would observe the frequency of the entire class for engagement to see if the occurrences showed any interesting data (Figures 4.1 and 4.2). I also was interested in seeing how the class, particularly how members of Group B would respond now that Thomas was present in class again. As we began class, I was unsure of how true my findings would be due to the fact that we had experienced extremely uncharacteristic heat during the days leading up to

today and my classroom was a balmy 77 degrees with no relief from the air conditioning system. However, it took no more than 5 minutes to get the class focused and ready review for their upcoming assessment. The class did not participate in their centers during the period. Instead students were asked to work silently and independently on a review worksheet and word search containing concepts learned in previous centers and musical vocabulary words.

Frequency Count for Engagement during Music Class

Time: 5 minutes Date: 10/27

| | |
|---|-----|
| 1) Asked questions in class | 5 |
| 2) Contributes to class/group discussion | N/A |
| 3) Worked with other students during class | 2 |
| 4) Actively participates in learning | 25 |
| 5) Engages in activities unrelated to classroom tasks | 3 |

Frequency Count for Engagement during Music Class

Time: 20 minutes Date: 10/27

| | |
|---|----|
| 1) Asked questions in class | 3 |
| 2) Contributes to class/group discussion | 6 |
| 3) Worked with other students during class | 7 |
| 4) Actively participates in learning | 25 |
| 5) Engages in activities unrelated to classroom tasks | 3 |

Frequency Count for Engagement during Music Class

Time: 10 minutes Date: 10/27

| | |
|---|----|
| 1) Asked questions in class | 3 |
| 2) Contributes to class/group discussion | 3 |
| 3) Worked with other students during class | 3 |
| 4) Actively participates in learning | 24 |
| 5) Engages in activities unrelated to classroom tasks | 3 |

Frequency Count for Engagement during Music Class

Time: 25 minutes Date: 10/27

| | |
|---|-----|
| 1) Asked questions in class | 6 |
| 2) Contributes to class/group discussion | N/A |
| 3) Worked with other students during class | 6 |
| 4) Actively participates in learning | 25 |
| 5) Engages in activities unrelated to classroom tasks | 2 |

Frequency Count for Engagement during Music Class

Time: 15 minutes Date: 10/27

| | |
|---|----|
| 1) Asked questions in class | 3 |
| 2) Contributes to class/group discussion | 5 |
| 3) Worked with other students during class | 1 |
| 4) Actively participates in learning | 24 |
| 5) Engages in activities unrelated to classroom tasks | 1 |

Frequency Count for Engagement during Music Class

Time: 30 minutes Date: 10/27

| | |
|---|----|
| 1) Asked questions in class | 6 |
| 2) Contributes to class/group discussion | 9 |
| 3) Worked with other students during class | 18 |
| 4) Actively participates in learning | 23 |
| 5) Engages in activities unrelated to classroom tasks | 4 |

Figure 4.1 Class Frequency Count Part 1

Frequency Count for Engagement during Music Class

Time: 35 minutes

Date: 10/27

| | |
|---|----|
| 1) Asked questions in class | 5 |
| 2) Contributes to class/group discussion | 15 |
| 3) Worked with other students during class | 20 |
| 4) Actively participates in learning | 22 |
| 5) Engages in activities unrelated to classroom tasks | 3 |

Frequency Count for Engagement during Music Class

Time: 40 minutes

Date: 10/27

| | |
|---|-----|
| 1) Asked questions in class | 0 |
| 2) Contributes to class/group discussion | N/A |
| 3) Worked with other students during class | 23 |
| 4) Actively participates in learning | 20 |
| 5) Engages in activities unrelated to classroom tasks | 5 |

Figure 4.2 Class Engagement Frequency Count Part 2

The data from the frequency counts showed that as class progressed, students became more engaged in their activity. Throughout class there were a small number of occurrences of off task behaviors. These distractions did not seem to affect the other students as nearly the entire class demonstrated active participation in their learning at some point during class.

Members of groups A, C and D appeared lethargic throughout the class period. While the students accomplished their tasks, many of the students seemed tired, unmotivated and did not appear to want to do much. Group B held on strong through most of the class. Jason arrived late do to an impromptu visit to the nurse directly from lunch. He stopped to chat with Lisa before beginning his work. Thomas started his review by sitting quietly. He appeared reserved, not wanting to socialize or interact with anyone. I took a moment to observe how the rest of the class was working. I noticed that all students had slowly migrated to work with other students. Seeing as they were all working quietly together, I allowed the digression from my instructions. As I looked to see who the students were working with, I was a bit shocked to realize that most of the class had partnered or grouped together with the members of their learning center groups.

And when students came to me for guidance or assistance with their seat work, many of them first asked their group members for help before coming to me. Roughly twenty five minutes into class, Jason and Alan began chatting. After no more than thirty seconds, their chat turned into questioning and cooperation and the pair of boys had their heads immersed in their work.

I had planned to allow students who finished their review sheets early to work on musical word searches based on the musical vocabulary and concepts learned in their centers. Thirty minutes had passed in the class and I overheard several pairs of students interacting with one another asking questions about their review material. As the minutes passed by, the discussion of music material began ranging from what one student did to another at lunch, to how disappointed one student was that the Phillies had lost the NCLS to the Giants a few days before. With the last group finished with their review, I attempted to gather the students for a follow up and closure to the review. My attempts were futile as the uncomfortable temperatures mixed with the apparent mental fatigue of the students made for an unproductive conclusion to class.

I hope it worked...

Our first standard test in music was based on all of the aspects taught during the learning centers. Students were asked to identify pitches on a music

staff, define musical vocabulary and apply their learning of pitches in a pentatonic scale to a predetermined key of music. I hoped that as students entered class, they would calmly take their seats and mentally review the material. Instead, what arrived were 25 students who had brought mounds of the previous night's Halloween loot to lunch, and the effects of the sweets had apparently just kicked in as they passed the threshold to my classroom. We spent the first five or six minutes regaining our focus and reviewing the test material one final time. Lisa was one of the students who was fully prepared for the test. As I asked questions to help review the material, she was one of the only students who volunteered answers, along with Thomas and Susan. As Lisa explained her answers to me, it appeared as though I saw several light bulbs turn on in the class. A dozen "Oh!"s came across the class as she eloquently explained her understanding of the pentatonic scale. When there were no questions to be asked, I prepared to administer the assessment. Thomas approached me as the other students separated themselves and asked if there was anything that he could help me out with. I allowed him to pass out pencils and make sure everyone received an assessment. I read the directions out loud for the entire class, and the students proceeded to complete their work. Throughout the assessment, there was not a single student who acted out or showed behaviors of being non-engaged in the test. Figure 4 shows the frequency count that I kept of the students as they

worked through their assessment. The numbers in the chart indicated that once the assessment had begun, students were engaged in their work. As class progressed and students completed their assessment, they were allowed to complete a musical word search that I had created for them. Once all students had finished their test, they were permitted to work with each other in an attempt to find all of the hidden words. Some students chose to work on their own, while several others decided to partner up and finish their word search together.

Frequency Count for Engagement during Music Class

Date: 11/1

| Minutes through class | 10 | 20 | 30 | 40 |
|---|-----|-----|-----|-----|
| 1) Asked questions in class | 3 | 5 | 7 | 0 |
| 2) Contributes to class/group discussion | 1 | 2 | 0 | 0 |
| 3) Worked with other students during class | 0 | 0 | 13 | 0 |
| 4) Actively participates in learning center | N/A | N/A | N/A | N/A |
| 5) Engages in activities unrelated to classroom tasks | 5 | 0 | 0 | 0 |

Figure 5. Engagement frequency count during assessment

In it for the long haul

With our return to the centers, I was anxious to see how the students would interact with each other, and what would come of Group B. I also was curious to see if there was any response from students as they received their graded assessments back. As it turns out, I could not have asked for better results. All four of the groups immediately went to their assigned center. I did not have to review any of the expectations of what would occur at the centers, or how they were run. Group B was my main focus for the day. At the listening center, Thomas once again stepped back into the leader role as the group divided into partners and began listening to their melody. Each member of the group took an active role in participating by following the melodies that they listened to on a paper and tracing the notes as the melody moved along. As I observed the other groups, I noticed that not a single student was off task from his or her work. Several students who previously had been a bit difficult to keep focused were quietly working with their group members to accomplish their tasks. Maybe seeing the results of their assessment was a “wake-up call” that they needed to take their learning seriously, and take responsibility for their learning while in their groups.

As students began straightening up after the piano played, it was clear that the movement from center to center had become a staple in how class was run.

Students were not chatting or fooling around as they had previously. Instead, once the centers were ready to go, students stood quietly looking at me and waiting for their cue to move to the next center. Group B had no issues at their notation center. Thomas decided to do his reading on his own, while the remainder of the students in the group partnered up to complete the reading. Each of the other groups worked just as quietly, and just as efficiently. During the eight minutes this center lasted for, I did not have to say a single word to any of the students. I was able to move about the classroom, feeling almost not needed, and observed what each student was doing in their center. When time had expired, I walked across the room towards the piano. By the time that I had reached it, three of the four groups had already begun preparing for their third rotation.

At the performance center, Thomas rose to the occasion and lead the group for the third time during the class. Each student took his/her own instrument, and began working on the ostinato that was prepared for them. Jason and Lisa were visibly confused about the patterns that were on the paper. Thomas seemed a bit puzzled, until he read the directions for a second time. He quickly looked at the paper, and he grasped the concept out of the air like a toddler trying to catch a bubble. Thomas and I had a short dialogue about his epiphany, which also revealed his understanding of how the learning centers worked.

Thomas: Oh Mr. Greger! I got it! I got it! Oh... parallel, because they don't move any further apart from each other.

Mr. Greger: And how did you know what parallel movement was Thomas?

Thomas: Because that's what we just read about at the notation center.

It's kinda like you set up the centers so that they all go together, like a puzzle.

Mr. Greger: Excellent! That's *exactly* how it is supposed to work Thomas.

Thomas: So I guess that explains why everything we did on that last test was all the stuff from the centers we did before that, right?

Mr. Greger: You got it, Thomas.

Hearing Thomas say this made my day. As I smiled and walked away, I noticed Thomas watching me. I walked to the next group to observe what they were doing. I briefly glanced over at Thomas to see if he was continuing to practice his melody and help the rest of the group. Instead, he was just sitting there, with a nonchalant posture working through the melody as if our previous conversation never happened. I didn't know why he appeared to try extra hard when I approached the center, but seemed to barely care when I wasn't right there working with him. As I redirected my attention to the other groups, I observed

that each group was working diligently to accomplish their tasks. Any off-task behavior was quickly extinguished by a group member in an effort to keep the group working towards their goal. I turned to note what time it was, and unfortunately, class had ended. I had to apologize to the students for only being able to visit three centers, and assured them that I would review all of the materials at the start of the next class so that they weren't missing any key concepts or information.

In the mean time...

In between classroom observations, I ran into Thomas while waiting outside at parent pickup at the end of the school day. Thomas was patiently waiting outside for his ride. Near the doorway, a tree stood about seven feet from the building. I had previously told a group of students not to hang from the tree, or try to climb it for safety reasons. On this day, Thomas decided it was his turn to make an attempt. I made eye contact with him, and he smiled at me. I turned to monitor the students entering their cars for a moment, and looked back to see Thomas strolling towards the tree. I moved in closer to the tree, and he quickly hopped off the ground and began climbing the tree. After I yelled at him to get out of the tree, we had a discussion.

Mr. Greger: So why did you think that it was ok to climb that tree?

Didn't you hear me tell the other kids that you weren't allowed to do that?

Thomas: Yeah, I know. I didn't mean to.

Mr. Greger: So you did it anyway? I don't get it Thomas. I know you're smarter than that. And what do you mean you didn't mean to? You made the choice to climb that tree as soon as you looked over at me and saw me watching you.

Thomas: I know.

Mr. Greger: And then you saw me come towards you, so you hop in the tree? I mean what's up man? What's this about? This reminds me of what you did in class the other day. You act brilliant when I'm right there in front of you, and then when I walk away, it's like you don't care.

Thomas: I do care. I don't know. I just like it when people are watching me. That's all. Guess it kinda makes me feel good.

Mr. Greger: Well, there are better ways to get people to watch you than climbing trees. And remember, just because I'm not two feet in front of you doesn't mean I'm not watching you. You're

smart, and you've got a good head on your shoulders. Use it. Alright?

Thomas: Yeah. You're not mad at me?

Mr. Greger: Why would I be mad? Your choice could've been better man, but I'm not mad. Like I said, there's better ways to get attention. Simply by doing what you're asked in class, or anywhere, people will pay attention. You just have to decide what kind of attention you want.

Interested and eager to learn...

Students entered class during this tenth observation excitedly asking what they would be doing for the next forty minutes. I admit, I was happy that the students had become so interested in their learning that they couldn't wait to discover what they would be asked to do. As I finished reviewing what was occurring at each center, students started to brace themselves in their chairs like track runners would do before the gun shot off to start the race. All four groups arrived at their centers, read the directions and began working. Group A struggled with their concepts at the performance center, so I took some extra time to help them out with their melodies. Group B was solid, as per usual. Each member monitored everyone else in the group to make sure they were on task and were

learning the proper materials correctly. All members remained engaged throughout the center. As did the members of Groups C and D.

When Group B arrived at the listening center, I was surprised to see that the group had broken into different partners than usual. Alan and Jason were situated on opposite sides of the group, with Thomas in the middle and Lisa and Susan on either side of him. The group worked wonderfully together, accomplishing all tasks with time left over to review. I asked the students if the new partners was on purpose. They told me that it simply happened by accident. The new arrangement was not intentional. They merely worked with the first person that they saw when they arrived at the group as to not waste time. Groups A, C and D all worked quietly and efficiently at their centers. Group A needed assistance once again, but after a moment they continued on their own.

At the third rotation, Groups A, C and D were mostly on task. Group B continued with their group work seamlessly. Each member read the directions at the center and began completing the worksheet laid out for them. Occasionally, members would check in with one another to make sure that they were doing their work correctly. No real leader emerged at the center as each student was responsible for his/her own work.

The final rotation was nearly an exact copy of the third. Susan, Lisa, Alan, Jason and Thomas all worked quietly on their melodies, helping each other

correctly perform the rhythms and pitches when needed. Members in Group C were slightly off task until the girls pulled the boys back in to accomplish their goal.

Overall, the centers ran extremely smoothly. Each group demonstrated that they understood the expectations of their center, they could self-monitor their group with only a small amount of help from me, and they could check with each other for understanding when they were not sure of the materials they learned.

November was half over and during the past several observations I noticed a high level of consistency with how the centers had run. For the most part, each group displayed an understanding of the process of how the centers progressed through class. All members of the groups had followed the directions presented to them and worked to complete their assigned tasks at each center. At this point, I had not observed much new data during class, and I felt that my study would soon be coming to a close. I hoped that my suspicions were correct.

Prepping for the assessment

When students arrived for the eleventh observation, I briefed the class on their assignments for the day as well as reminded the students that they would be having one final assessment during the next class period. Students appeared eager to get to work, and I hoped that the reason was to reinforce the concepts that they had been working on for the previous two weeks. All four groups quickly

approached their centers, read through the directions, and began their tasks. As I walked about the classroom, I felt proud that I did not need to constantly remind students to be on task. It appeared as though the centers had sparked interest in all of the students. I thought back to how my classes had run the previous school year and couldn't help but smile at what I observed. Group B had continued on as steady as a metronome. Thomas again read the directions out loud to his group mates and all students began practicing their melodies on the xylophones. Lisa and Susan worked on their rhythms and techniques, all while keeping an eye on Alan and Justin to make sure they were comprehending the concepts that had been presented. Groups A, C and D similarly went to work with little hesitation. In each group, students interacted with each other, most often to make sure that they had performed their task correctly. The only times that I needed to speak with students occurred when clarification was needed that could not be given by the other group members.

As the piano sounded, students swiftly prepared their center for the incoming group, and waited for the cue to head to the next center. At the second rotation, there were no observed off task behaviors. At the singing center, Thomas, Susan and Lisa worked together to review the information for the assessment. Alan and Jason quietly paired together to run question and answer drills with one another. As I listened to the group review the information, I nearly

shouted for joy as I heard each member of the group confidently answer each others questions, and I prayed that this achievement that they displayed would translate to their upcoming assessment. Each of the remaining three groups worked seamlessly through their tasks. As I approached each center, I noticed how focused each member was. Previously, some students would become aware that I was watching over. As I moved closer, I could see the demeanor of students change; sometimes for the better, sometimes for the worse. During this class, students seemed unaffected by my presence at the centers. I truly was not needed due to the fact that the students were all leading one another. Each group demonstrated trust and confidence with their peers. It was at this point that I felt that my role in the classroom had changed. Instead of being the lector of the class, I was but a mere proctor who oversaw the children's progress while they relied on one another for their learning. It was remarkable!

When the third rotation began, I stepped back and allowed the groups to run themselves. As had occurred before, each group reached their center and immediately began to work. I did not need to give any reminders of what the students were to do. I did not have to redirect any student back to their assigned task. All I had to do was sit back and watch the pieces of the puzzle come together to create a masterpiece of student-led learning.

Before the final rotation began, I gave some words of encouragement and praise to the students. As I spoke, many students smiled and I could see their faces turn red. I hoped that their responses were those of pride and accomplishment because in my four years of teaching, I don't recall ever feeling as proud as I did that day seeing my students as they took responsibility for their own learning as well as the learning of their classmates. Each group quickly began working in their center, with all students focused on their task and making sure the remaining members of their group were performing their assignment appropriately. As the minutes flew by, I watched with excitement as individuals from each group congratulated one another when they had completed their goal.

At the conclusion of class, I brought the students together to review the concepts that had been presented during their centers. When I asked the students questions about the material presented, I was thrilled to hear detailed responses about how each center linked to the next. Students explained to me that they felt that each of the centers connected to each other so that when they traveled from one center to the next, they would be able to use the information that they learned from the previous center to help them complete tasks at their current center. When the class had ended, I thanked the students for dedication to their work, and wished them the best of luck on their upcoming assessments.

Closure

I was anxious for the students to complete their assessments as they entered the classroom on this cold November day. With all of the amazing work that they had completed during the past few classes, I was worried that the students would not perform to the levels that I anticipated. What if the assessments did not show the achievement that I expected? How would the high levels of engagement that I observed translate into achievement scores on paper and through performance? Did I as an educator do enough to prepare these students for their assessment, and did I provide them with the materials and opportunities to learn the intended concepts? Over the next forty minutes, I knew my answer.

I spent the first five minutes of class reviewing the overarching concepts and questions of the unit with the students. When there were no questions to be asked, I began the assessments. This assessment was two-fold. The first portion of the assessment was based on the historical and cultural information presented at the learning centers. Students were asked to complete a matching written assessment, along with an extension question where students had to apply their learned information in order to appropriately answer the question. The second part of the assessment was performance-based. Students had been working on preparing a xylophone melody which demonstrated their abilities to perform

parallel movement within the melody to the appropriate rhythm. I decided that I would have three groups begin working on the written assessment as I worked with the remaining group on the performance assessment.

The first group arrived at the xylophones ready to perform. I quickly played the accompaniment for the students so that they could identify the tempo of the melody as well as prepare their hands for the appropriate pitches that they were asked to play. Some students were so anxious that they immediately began playing along with the melody instead of listening and mentally reviewing the patterns that they needed to play. After a brief moment, the students realized that they were getting ahead of the group, and stopped playing. When the accompaniment stopped, each student prepared their hands on their assigned melodies. As I observed the remainder of the class, all students had their heads down, silently reading the test. I continued with the group as they performed their melodies.

When the group had completed, I allowed them to return quietly to their seats and prepared the next group for their performance. As the second group took their positions behind an instrument, I again played the accompaniment for the students so they had the opportunity to prepare for their performance. As the music stopped, each student reset their hands and looked up at me for the cue to begin. This group performed a nearly flawless rendition of the assessment. I

watched as a smile came upon each members face when they completed their melody.

The third group struggled a bit to find the beat and tempo of the piece. As I quietly clapped the beat, members adjusted their playing to the appropriate rhythm and tempo that the accompaniment was providing. As this group performed, I noticed that a few of the students had completed their work and turned in their papers to the front of the classroom. To my amazement, not a single student sitting in his/her seat was talking to another, or distracted anyone else who was working on their test. Instead, several of the students were fixated on the performers, some were moving their hands in sync with the performers as they performed their melody. When the students completed their performance, I sent them back to their seat and called on the final group.

Just as the three previous groups had done, the fourth group approached their instruments and began reviewing the melody. At this point, nearly all remaining members of the class had completed their written assessment and were glued to the performers on the floor with me. After a review of the accompaniment, the final group performed their melodies with a high level of achievement. As they finished their performance, students returned to their seats and completed their written assessment, if they had not already.

In the remaining six minutes of class time, I had students complete a post-study survey which required them to reflect upon their own levels of engagement throughout the research study. On the back of the papers, I asked students to write down any thoughts or comments that they had about the study. Most all of the students noted how they enjoyed participating in the learning centers during class, as well as the information that was presented in the centers. As the students left class, many asked me what we would be doing in the upcoming classes, and I informed them that we would be continuing with the learning centers for a few more classes before we reached our composer unit. As Thomas exited class, he stopped to get a drink from the water fountain. He did not continue through the door. He paused for a moment, as if he had something to say.

Mr. Greger: What's up, Thomas?

Thomas: Well, I was just thinking of something, but I didn't want to ask.

Mr. Greger: No, go ahead, man. What's going on?

Thomas: OK. I just wanted to know what now?

Mr. Greger: What do you mean?

Thomas: I mean, you're done with the study thing for your class, right?

Mr. Greger: Well, mostly. I still have a lot of work to do on it.

Thomas: Oh, ok. Well, I guess I mean, you're done with your study on us. So what happens now?

Mr. Greger: I don't know for sure Thomas, but that's what I'm working
on.

Thomas: OK, sounds good. Thanks Mr. Greger.

FINDINGS

From the beginning, my study had two purposes: to gauge the engagement levels of students as well as measure the achievement levels during learning centers. Throughout the process of observing these variables, four main themes emerged from my study. Each theme emerged through the study, and each of the themes was directly related to the intended purposes of this qualitative research study.

Responsibility Towards Learning

Theme 1: Students were able to gain a sense of responsibility towards their own learning during centers. When students displayed a self-responsibility of learning, levels of student interaction as well as achievement rose.

When my study began, students would commonly arrive at their centers and often rush through their work in an attempt to be the first ones done, or move to the next center. However, as time progressed, students began to display a sense of responsibility for their learning. Thomas, Susan, Lisa, Alan and Jason all time and time again took the time and effort to make sure that they were on task with their work. Typically, if one student became disengaged for a moment, one of the other students would step in to help the lost student find his/her way back to work.

Lisa and Susan in particular demonstrated on several occasions not only a responsibility towards their own learning, but also a responsibility toward the learning of their group members. Several times these two girls would act quickly and appropriately to get their work accomplished during their center. It was also common for Alan and Jason to become slightly off task and focus. Time after time, it was Susan or Lisa who stepped in and aided the boys back into their work. At the conclusion of the study, Lisa wrote a comment that aligned perfectly with my thoughts.

“The centers give us a chance to work with each other and learn with each other. It’s nice that we have to do the learning on our own. It made it feel more real. It was also kinda fun to help out the boys in the group. It was cool to be the mini teacher.”

The boys also demonstrated increased self-responsibility for learning. While Alan and Jason did occasionally get off track, they also were able to work together as partners a great deal. As each independently gained a sense of responsibility for his learning, they interacted more during the centers. Instead of hearing the boys talking about sports or lunch, I overheard conversations about parallel melodies, and the history of African music. Along with the raised levels

of student interaction, these students also showed growth in terms of academic achievement. In particular, Alan and Jason began the school year averaging a score of 2 or 3 on their assessments. At the conclusion of the research study, both boys were averaging scores of 3 on all of their assessments, occasionally scoring a 4 which demonstrated advanced understanding and application of the learned concepts and standards. Jason performed very well during his first assessment, as noted in Figure 6. Jason's only loss of points occurred when he was unable to match all of the pitches in the melody. Jason demonstrated a basic understanding of the content in Figure 7. The exception to this was when Jason scored a 1 on an assessment (Figure 8), which occurred on the class immediately following when he was not focused and off task. During the last assessment Jason took, Figure 9, Jason demonstrated full understanding and comprehension of the skills and concepts taught.

NAME: [REDACTED] [REDACTED]

| <i>Singing</i> | 12 points possible | Song Title |
|------------------|--------------------|---|
| Pitch | 2 /3 | Student accurately sings the correct pitches, reading notes from a music staff. |
| Rhythms | 3 /3 | Student performs the pitches with rhythmic accuracy as notated. |
| Technique | 3 /3 | Student demonstrates proper singing techniques, including posture and breathing. |
| Tone | 3 /3 | Student demonstrates an individual quality sound while performing; using singing voice, not speaking voice. |
| Total | 11 /12 | 4 - 12 points. 3 - 10 or 11 points 2 - 8 or 9 points 1 - 7 or fewer |

Figure 6. Jason's 1st Assessment

Name: _____

10/18 (2)

6th Grade Unit 1 Assessment

Matching – Please select the answer that best describes the vocabulary word and *neatly* write the letter in the blank.

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> <u>A</u> Syncopation | <input checked="" type="checkbox"/> A. quick and energetic |
| 2. <input checked="" type="checkbox"/> <u>F</u> Taiko | <input checked="" type="checkbox"/> B. organized sounds and silences of different lengths |
| 3. <input checked="" type="checkbox"/> <u>G</u> Rhythm | <input checked="" type="checkbox"/> C. A scale or melody that contains 5 pitches |
| <input checked="" type="checkbox"/> <u>C</u> Upbeat Tempo | <input checked="" type="checkbox"/> D. rhythm where stressed sounds occur on weak, or in between beats |
| <input checked="" type="checkbox"/> <u>D</u> Pentatonic | <input checked="" type="checkbox"/> E. Japanese drumming; means “fat drum” |

Meter: Identify the meter signature by counting the beats in each measure. Place the correct number on top.

Musical notation on a staff with two measures. The first measure contains four quarter notes and has a handwritten '4' in a box above it and a '4' below it. The second measure contains three quarter notes and a quarter rest, with a handwritten '3' in a box above it and a '4' below it.

Identify the letter name, and solfège syllable for these pitches in the G Pentatonic Scale

Musical notation on a staff showing six notes of the G Pentatonic Scale. Below each note are boxes for Solfège and Letter names.

| | | | | | | |
|---------|---|---|---|---|---|---|
| Solfège | <input checked="" type="checkbox"/> <u>So</u> | <input checked="" type="checkbox"/> <u>La</u> | <input checked="" type="checkbox"/> <u>Do</u> | <input checked="" type="checkbox"/> <u>Re</u> | <input checked="" type="checkbox"/> <u>me</u> | <input checked="" type="checkbox"/> <u>Fa</u> |
| Letter | <input checked="" type="checkbox"/> <u>C</u> | <input checked="" type="checkbox"/> <u>G</u> | <input checked="" type="checkbox"/> <u>B</u> | <input checked="" type="checkbox"/> <u>G</u> | <input checked="" type="checkbox"/> <u>B</u> | <input checked="" type="checkbox"/> <u>D</u> |

Figures 7. Jason's 2nd Assessment

Name: _____

①

Please match the phrase on the right with the appropriate Description on the left.

- | | |
|--|--|
| 1) <u>E</u> the meaning of Tatenda | A. Wood Carvings |
| 2) <u>D</u> the country in Africa that Tatenda is from | B. Cattle, sheep and chicken |
| 3) <u>F</u> crops that are grown by the Shona | C. Hand-woven baskets and pottery |
| 4) <u>A</u> livestock that are raised by the Shona | D. Zimbabwe |
| 5) <u>C</u> artwork the Shona people are most known for | E. Thank You |
| 6) <u>A</u> Shona women are known for making these | F. Corn, rice, beans and potatoes |

EXTENSION: Please read the following paragraph and answer the question.

Simba and Nala are husband and wife. They are Shona people, and have lived together for 45 years. They have 6 children together, as well as 10 grandchildren. Simba was born in 1957, and Nala was born 4 years before Simba.

Q: Who is the head of this household, and please explain why?

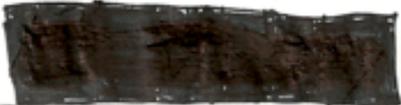
Nala is the householder
because she was born first

Figure 8. Jason's 3rd Assessment

| Tatenda – Rubric | 12 Points Possible | Student Name: [REDACTED] |
|---------------------------|--------------------|--|
| Consistent Parallel Notes | 4 /4 | Space between notes stays the same. Both hands move higher and lower together, at the same time. |
| Pitch Accuracy | 3 /4 | Student performs the correct pitches as notated. |
| Rhythmic Accuracy | 4 /4 | Student performs the correct rhythm as notated |
| <i>Total</i> | 11 /12 | 4 – 12 points <u>3 – 10 – 11 points</u> 2 – 8 – 9 points 1 – 7 or fewer points |

Figure 9. Jason’s 4th Assessment

Alan began by demonstrating his ability to accurately sing though the first assessment (Figure 10). Similar to Jason, Alan was not able to match all of the pitches in the melody, however, he demonstrated good rhythm, vocal technique and tone which earned him a three on his assessment. Alan's second assessment (Figure 11) did not go quite as well. He demonstrated basic understanding of the concepts presented in class. It was after this assessment that both Alan and Jason began working together in a positive manner. The students discussed learning materials instead of other topics. They assisted each other when necessary to complete their task. During the class prior to the third assessment, Jason became off task, while Alan continued to focus and work on his center tasks. This was demonstrated by Alan's great score on his assessment (Figure 12), and compared to Jason's score (Figure 8) we can see how Jason's off task behaviors affected his achievement. Alan finished off the study by earning another score above the expected learning level (Figure 13). It appeared that after Jason received his third assessment score, both he and Alan took responsibility for their learning by making sure the other was on task, focused, engaged and actively participated in the assignments at the learning centers. When students have learned a sense of responsibility for their learning, it would be difficult for them to not have increased academic achievement and student interaction.

NAME: 

| <i>Singing</i> | 12 points possible | Song Title |
|-----------------------|--------------------|---|
| Pitch | 2 /3 | Student accurately sings the correct pitches, reading notes from a music staff. |
| Rhythms | 3 /3 | Student performs the pitches with rhythmic accuracy as notated. |
| Technique | 3 /3 | Student demonstrates proper singing techniques, including posture and breathing. |
| Tone | 3 /3 | Student demonstrates an individual quality sound while performing; using singing voice, not speaking voice. |
| Total | 11 /12 | 4 - 12 points. 3 - 10 or 11 points 2 - 8 or 9 points 1 - 7 or fewer |

Figure 10. Alan's 1st Assessment

Name: [REDACTED]

6th Grade Unit 1 Assessment

11/18 (2)

Matching – Please select the answer that best describes the vocabulary word and *neatly* write the letter in the blank.

- | | |
|----------------------------|---|
| 1. <u>D</u> , Syncopation | <input checked="" type="checkbox"/> quick and energetic |
| 2. <u>E</u> , Taiko | <input checked="" type="checkbox"/> organized sounds and silences of different lengths |
| 3. <u>B</u> , Rhythm | <input checked="" type="checkbox"/> A scale or melody that contains 5 pitches |
| 4. <u>A</u> , Upbeat Tempo | <input checked="" type="checkbox"/> rhythm where stressed sounds occur on weak, or in between beats |
| 5. <u>C</u> , Pentatonic | <input checked="" type="checkbox"/> Japanese drumming; means "fat drum" |

Meter: Identify the meter signature by counting the beats in each measure. Place the correct number on top.

Identify the letter name, and solfege syllable for these pitches in the G Pentatonic Scale

| | | | | | | |
|---------|--|--|-----------------------------|--|--|--|
| Solfege | <input checked="" type="checkbox"/> re | <input checked="" type="checkbox"/> re | <input type="checkbox"/> Do | <input checked="" type="checkbox"/> so | <input checked="" type="checkbox"/> fa | <input checked="" type="checkbox"/> do |
| Letter | <input checked="" type="checkbox"/> E | <input checked="" type="checkbox"/> F | <input type="checkbox"/> G | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> D |

Figure 11. Alan's 2nd Assessment

Name: _____

4

Please match the phrase on the right with the appropriate Description on the left.

- | | |
|--|-----------------------------------|
| 1) <u>E.</u> the meaning of Tatenda | A. Wood Carvings |
| 2) <u>D.</u> the country in Africa that Tatenda is from | B. Cattle, sheep and chicken |
| 3) <u>F.</u> crops that are grown by the Shona | C. Hand-woven baskets and pottery |
| 4) <u>B.</u> livestock that are raised by the Shona | D. Zimbabwe |
| 5) <u>A.</u> artwork the Shona people are most known for | E. Thank You |
| 6) <u>C.</u> Shona women are known for making these | F. Corn, rice, beans and potatoes |

EXTENSION: Please read the following paragraph and answer the question.

Simba and Nala are husband and wife. They are Shona people, and have lived together for 45 years. They have 6 children together, as well as 10 grandchildren. Simba was born in 1957, and Nala was born 4 years before Simba.

Q: Who is the head of this household, and please explain why?

Nala is because in shona
the oldest people in the house
are in charge

Figure 12. Alan's 3rd Assessment

| Tatenda – Rubric | 12 Points Possible | Student Name: [REDACTED] |
|----------------------------------|--------------------|--|
| Consistent Parallel Notes | 4 /4 | Space between notes stays the same. Both hands move higher and lower together, at the same time. |
| Pitch Accuracy | 4 /4 | Student performs the correct pitches as notated. |
| Rhythmic Accuracy | 4 /4 | Student performs the correct rhythm as notated |
| <i>Total</i> | 12 /12 | 4 – 12 points 3 – 10 – 11 points 2 – 8 – 9 points 1 – 7 or fewer points |

Figure 13. Alan's 4th Assessment

Motivating Factors of Learning and Engagement

Theme 2: Learning centers provide the opportunity to create motivating factors of learning, including positive student interaction, responsibility for learning and student interest. These factors not only enhance the students' interest level, but also enhance engagement in all aspects of the classroom.

On several occasions, students displayed positive interaction with one another. Sometimes it was when students were asking questions of others, or when students would lend a hand to a group member in need. Had the students not been in centers when these concepts and information was presented, it's very likely that students would not have had the opportunity to interact in the manner in which they did. There was a moment when Thomas and Lisa interacted during a center near the beginning of the study. Both students were attempting to learn a given melody and its rhythm on a xylophone. Each student had questions about how to perform the pitches and rhythm of the melody. Instead of directly asking me, the two students engaged in a conversation with one another. They spoke back and forth calmly listening to the other plead their case, then waited for a rebuttal from the other party. As these students discovered the answers to their questions, they also gained a sense of responsibility for their learning, not to mention become actively engaged in their learning.

Students demonstrated daily their enhanced interest in Music. Often, all that I needed to do was to observe the students walk into the classroom. As the students would enter, they looked around the room to see what materials were laid out for them in the learning centers. Many students entered class with smiles, pointing to the various centers set up with excitement. When our rotations began, students would nearly run towards their assigned center anxious to begin learning and working on their tasks. When students became interested in their learning task, they displayed more behaviors of engagement, including asking questions about the material, talking with other students in their groups about the concepts, and working cooperatively to complete their goals. As the research study continued on, students began to see the connections from one center to the other, noting the big idea of what they were expected to learn. This allowed students to become more engaged with centers and concepts in a class that they had expressed low levels of engagement or interest in prior to the research study.

Student Interaction Leading to Achievement

Theme 3: When students are interacting in a positive manner with one another, the possibility for achievement grows dramatically. As a result, the discourse occurring in the class is conducive to further academic growth.

Student interaction helped pave the way for the growth of academic achievement in this study. Members of each group were required to work

together in their groups to complete assigned tasks. While students were made aware of the intended learning concepts presented, students were permitted and encouraged to socialize and interact with one another as a way of leading their own learning. The more that students interacted with each other, the more comfortable the students became with their peers. Being able to trust in their classmates allowed interactions to become more positive and focused on the materials in each center. Group B in particular steadily improved upon their interactions, most notably occurring with Alan and Jason. These boys would often work together in their group. At times, they would be off task, or discussing topics unrelated to their center work. As the study progressed, their interactions became more and more focused on their learning. Conversations of occurrences in school and social gatherings on the weekends transformed into discussions of how melodies moved from pitch to pitch, and correctly identifying notes in a pentatonic scale on a given melody. When interactions became positive between the boys, the chance for academic growth grew. As shown in Figures 6-13, Alan and Jason both demonstrated academic achievement once their interactions with each other became positive and academic in nature.

The other members of the group also allowed for the positive interactions that were displayed. Susan and Lisa were key members that lead to such great cohesiveness in their group. Throughout the study, these girls took responsibility

for their learning as well as the learning of the entire group. After the first few observations, Lisa and Susan often would help redirect and support the other members of their group who became unfocused during their center. Using encouragement, honesty, and on occasion a dose of tough love, the girls enabled the boys to work together in a consistent manner that had not been present before. As the interactions amongst group members became consistently positive, achievement scores for most of the group members rose. It was at this point of the study that I chose to focus my attention on this group of students. Their interactions with one another was fascinating, and I was interested in seeing how the groups' chemistry, achievement and engagement would unfold through the course of the study.

Although the remaining three groups were not the focus of the study, each group demonstrated high levels of positive interaction. After the first four observations, negative interactions became few and far between, if at all. When the groups demonstrated cohesiveness because of the positive interactions, a solid classroom discourse took place. Students did not have to continually ask me questions about what to do, where to go or how to tackle assignments. Instead, students relied on each other for answers and support to continue their work. As a result, the manner in which the class ran became similar to a fine-tuned engine. Each group moved about the classroom ready and eager to participate in the next

center. Six weeks into the study, the class, for the most part, ran itself. I was able to serve in the role as an observer during most of the class. I slowly but surely found myself as a proctor of the class. Granted, I still had to make sure that the students were on task and appropriately working to complete their assignments. However, the reality of the shift in how class was run was a tremendous achievement. Throughout the study I had noted the progression of discourse in the classroom in my observation log. At the beginning, I had to constantly remind students how to travel to the different centers, remind students what to do when they arrived and continuously redirect students who were off-task. By the end, students were self-sufficient and able to move from center to center with nothing more than hearing a few notes on the piano.

Group Social Structure

Theme 4: The social status and structure present in each group shows that students are comfortable with assuming different roles in their group. However, students tend to be less engaged with class when there is no determined leader present in the group.

There were several times during the study where students stepped into various roles in their groups. Benne and Sheats (1948) defined group roles that occur within a group setting. The roles that I observed were the coordinator, the orienters and the information seekers. Typically, the coordinator was the person

in the group who helped lead the entire group. This person would read the directions out loud to the group, begin the dialogue between students, and make sure that each member of the group was working toward completing their task. The orienters were those members who commonly would find key concepts, words or materials at each center that enabled the rest of the group to work towards their goals. The orienters also would identify students who were struggling with the material or were not focused and engaged in the center. These members also suggested how the off-task members would get back on course. The information seekers often would await the instruction of the group leader and would seek the assistance of the finders if needed during their center.

In the focus group, Thomas was almost always the group coordinator. He would make sure that all group members would understand the directions, and assisted with nearly any aspect of the center that his group needed. Students responded well to Thomas, asking him questions about materials they were unsure of, as well as checking for understanding of learned concepts. Thomas also was usually the first person in the group to see the big picture of what was being taught. When students saw that Thomas understood what was presented in the center, they seemed relieved and confident that they would soon be able to comprehend what they were expected to do. Lisa and Susan were most commonly the orienters of the group. After the instructions had been read, the

girls were the first ones to make sure the group was prepared with the appropriate materials, and commonly were the ones to help redirect and focus and group member who was off task. Alan and Jason usually were the information seekers. They appeared to find solace in the fact that they did not have to lead the group. They were fast to begin interacting with other group members and were not deterred when called out by the finders for improper behavior. The information seekers were also appreciative of the support and guidance given by the other members of the group.

Perhaps the most interesting outcome from the group social structure occurred when no definitive roles were present during a center. On the day that Thomas was absent, the cohesiveness of Group B appeared to dissolve. While the students were able to complete their assigned tasks, each of the group members demonstrated very little interaction with one another, and often seemed to have their minds wandering elsewhere. Academic achievement was unfazed during this class. The only real setback was that the students needed a bit more time to complete their work, which could easily be attributed to the lack of interaction during their centers. No one stepped into the role of the coordinator, or the orienter, for that matter. Instead, the group went through class like a hive of bees without the queen. No one gave the group direction, no one was really willing to assist with others when needed. It was a completely different dynamic than when

Thomas was present. During the next class when Thomas returned, the exciting dynamic of the group returned at full force. Thomas did not miss a beat, quickly reading out instructions, overseeing the entire group at nearly every center. Even when Thomas decided to sit quietly and work on his own, the rest of the group followed suit. When necessary, the finders reemerged at the center to lend a helping hand, or make sure that the materials were set for the group to succeed.

Summary

During the thirteen weeks that my research occurred, I witnessed an incredible transformation of my students, as well as a transformation in my own teaching methods. Students worked in learning centers for over three months learning standard concepts of sixth grade general music. During that time period, students were able to interact with group members that enabled them to further their academic achievement, as well as become more engaged in music class.

The social structures that occurred during the centers were a surprising aspect of my study that I did not even fathom when I began this process. Due to the discourse that resulted from the utilization of learning centers, students were able to take ownership and responsibility of their learning, as well as the learning of their classmates. The interest that students demonstrated in their centers, along with the high levels of engagement that were displayed throughout the study were

remarkable. With the amount of time that I had to prepare each center and unit of study, I was able to provide the opportunity for students to be successful in each aspect of learning that was presented, as well as provide a classroom environment that was highly conducive to learning. The various data collection methods led to the conclusion of findings presented.

The Next Step

The process that was endured to complete this research study was at times stressful. But when I stood back to look at the big picture of what my students and I had accomplished, I actually felt rather refreshed. Over the course of three months, my students participated in a new and exciting way to learn music. We embarked on a journey that had both high and low points. Along the way, my students were able to become engaged and interested in many different aspects of music through student centered learning. The interactions that were demonstrated, as well as the levels of engagement that were observed were extremely pleasing to see. As the journey took us deeper into our learning, students were able to experience class in a comfortable, learning conducive environment that allowed students the opportunity to enhance their academic achievement. Students were able to participate in a way, and at a level, that they had not been able to before.

I was also able to learn a great deal about how I ran my class, as well as have the opportunity to reflect upon and hone my teaching practices. As I continue to look back and reflect on the action research that has taken place, I hope to find further insights into the occurrences observed during class and allow what I've experienced to shape me into a better teacher. With the success that was demonstrated with this study, I am interested to see what new revelations occur when this practice is continued in my classes.

Many of the students involved have expressed a great desire to continue participating in learning centers during music class. Students have displayed a level of interest and motivation in learning that I have not seen in my short teaching career. Most of all, I am interested in revisiting the social structures and interaction that occurred during my study. While it was not a highly anticipated facet of my study, I cannot help but wonder about how the social interaction and structure of the groups could play an integral role in the learning and engagement that occurs during my class. I would also love to see how the different grade levels that I teach respond to the learning centers presented in music class. My fellow music teacher and I have spoken about utilizing centers again in class. With the results that I collected from this study, it would be hard to fathom that the future implementation of these teaching methods would be anything but beneficial to all parties involved.

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APPENDICES

APPENDIX A

HSIRB Consent



May 10, 2010

Mark Adam Greger
204 Faith Avenue Box 59
Stockertown, PA 18083

Dear Mark Adam Greger:

The Moravian College Human Subjects Internal Review Board has accepted your proposal: "Tonal Centers: How to Keep Students Engaged in Music Through Learning Centers." Given the materials submitted, your proposal received an expedited review. A copy of your proposal will remain with the HSIRB Chair.

Please note that if you intend on venturing into other topics than the ones indicated in your proposal, you must inform the HSIRB about what those topics will be.

Should any other aspect of your research change or extend past one year of the date of this letter, you must file those changes or extensions with the HSIRB before implementation.

This letter has been sent to you through U.S. Mail and e-mail. Please do not hesitate to contact me by telephone (610-861-1379) or through e-mail (browerg@moravian.edu) should you have any questions about the committee's requests.

George D. Brower
Chair, Human Subjects Internal Review Board
Moravian College
610-861-1379

APPENDIX B

Principal Informed Consent

April 12, 2010

Dear Mr. Yanek,

Next semester, from September 1st through December 23rd, in fulfillment of requirements to earn a Masters Degree in Curriculum and Instruction from Moravian College, I will be conducting an action research study. The purpose of this study is to help me reflect on my teaching as an educator, and to improve my classroom practice. I plan to implement learning centers in my 6th grade general music classroom as a means of increasing student engagement. I will be collecting data through several means, including observational logs, frequency counts, attitude scales, student performances and student surveys. The data derived from this study will help me determine how effective my learning centers are in motivating students to want to participate and learn during their general music class. All of the students' names will be kept confidential by the use of pseudonyms in the written report. Any samples of student work will have the names removed. To ensure the confidentiality of the students' identities, minor details in writing samples may be altered. During the study, all of the research materials will be kept in a secure location in my home, and all data will be destroyed at the conclusion of this action research study.

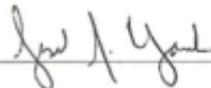
Throughout this research study, all of the students will receive the same instruction and assignments contained within the Music curriculum. Students' participation in this research study is completely voluntary, and in no way will participation or lack thereof affect a student's grade. At any time, participating students may choose to withdraw from this study by writing me a letter or expressing their wish to withdraw. If a parent or guardian wishes to withdraw their student from the study, they may send a letter or email notifying me of their wish. No penalty will be assessed for the withdrawal from the research study, and their information will not be used in any manner.

My faculty sponsor for this study is Dr. Joseph Shosh. He can be contacted at Moravian College by telephone at 610-861-1482 or by email at jshosh@moravian.edu.

If you have any questions or concerns about my action research project, please feel free to speak with me, or contact me via telephone at 267-885-8359 or through email at agreger@nazarethasd.org. If there are no questions, please sign and return the consent form below. Thank you in advance for your help and support.

Sincerely,
Adam Greger (Music Teacher)

I attest that I am the principal of the teacher conducting this action research study. I attest that I have read and understand this consent form, and have received a copy. Adam Greger has my permission to conduct this study.

Principal's Signature:  Date: 4/20/10

Assistant Superintendent's Signature  Date: 4/20/10

APPENDIX C

Parent Informed Consent

September 13, 2010

Dear Sixth Grade Parent/Guardians,

This semester, from September 1st through December 23rd, in fulfillment of requirements to earn a Masters Degree in Curriculum and Instruction from Moravian College, I will be conducting an action research study. The purpose of this study is to help me reflect on my teaching as an educator, and to improve my classroom practice. I plan to implement learning centers in my 6th grade general music classroom as a means of increasing student engagement. I will be collecting data through several means, including observational logs, frequency counts, attitude scales, student performances and student surveys. The data derived from this study will help me determine how effective my learning centers are in motivating students to want to participate and learn during their general music class. All of the students' names will be kept confidential by the use of pseudonyms in the written report. Any samples of student work will have the names removed. To ensure the confidentiality of the students' identities, minor details in writing samples may be altered. During the study, all of the research materials will be kept in a secure location in my home, and all data will be destroyed at the conclusion of this action research study.

Throughout this research study, all of the students will receive the same instruction and assignments contained within the Music curriculum. Students' participation in this research study is completely voluntary, and in no way will participation or lack thereof affect a student's grade. At any time, participating students may choose to withdraw from this study by writing me a letter or expressing their wish to withdraw. If a parent or guardian wishes to withdraw their student from the study, they may send a letter or email notifying me of their wish. No penalty will be assessed for the withdrawal from the research study, and their information will not be used in any manner.

My faculty sponsor for this study is Dr. Richard Grove. He can be contacted at Moravian College by telephone at 610-625-7016 or by email at rgrove@moravian.edu.

If you have any questions or concerns about my action research project, please feel free to speak with me, or contact me via telephone at 484-292-1111 x3288 or through email at agreger@nazarethasd.org. If there are no questions, please sign and return the consent form below. Thank you in advance for your help and support.

Sincerely,
Adam Greger (Music Teacher)

I attest that I am the parent/guardian of the child participating in this action research study. I attest that I have read and understand this consent form, and have received a copy.

My child _____, HAS my permission to participate in this study.

My child _____, DOES NOT have my permission to participate in this study.

Parent/Guardian's Signature: _____ Date: _____

APPENDIX D

Observation Log

Observation Log

Date: _____

Rotation ____

Singing-

Listening-

Notation-

Performance-

APPENDIX E

Pre-Survey

Student Engagement – Pre Survey

Name: _____

1. Most of the time, I enjoy participating in music class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

2. Most of the time, I like to ask questions in class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

3. I enjoy learning the information being taught to me in class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

4. Mostly, I enjoy the material being taught in class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

5. I enjoy writing music (notating) in music class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

6. I enjoy performing music in music class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

7. I enjoy listening to music in music class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

8. I enjoy singing music in music class.

| | | | | |
|-------------------|-------------------|---------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

APPENDIX F

Post Survey

Student Engagement

Name: _____

1. Most of the time, I enjoy participating in the learning stations in class.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

2. Most of the time, I like to ask questions in class.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

3. I enjoy learning the information being taught to me in class.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

4. Mostly, I enjoy the material being taught in class.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

5. I enjoy the Written Music station that is offered in the learning center.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

6. I enjoy the Performing Music station that is offered in the learning center.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

7. I enjoy the Listening to Music station that is offered in the learning center.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

8. I enjoy the Singing Music station that is offered in the learning center.

| | | | | |
|----------------------|----------------------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly Disagree | Slightly Disagree | Neutral | Agree | Strongly Agree |

APPENDIX G

Frequency Count

Frequency Count for Engagement during Learning Centers

Student: _____

| | |
|---|--|
| 1) Asked questions in class | |
| 2) Contributes to class/group discussion | |
| 3) Worked with other students during class | |
| 4) Actively participates in learning center | |
| 5) Engages in activities unrelated to classroom tasks | |